

HECO Utility Construction Agreement Amendments

WOFH - Change Order #2

KHG – Change Order #1

January 24, 2018

Briefing Purpose

- HART seeks approval for two (2) Change Orders so that HECO can procure specialized vehicles for use in maintaining their overhead lines where clearances fail to meet specified requirements as a result of the new rail guideway.

Background

- HECO informed HART of the working clearance requirements in a March 2013 letter.
- Utilities relocation work was not budgeted at that time as it was not contemplated.
- HART and HECO formed a Task Force to formulate resolutions to the clearance issues in May, 2015.
- TF analyzed a variety of solutions (relocation & non-relocation).
 - identified new equipment
 - Established variances on the West side
 - Confirmed locations where relocation/undergrounding was still required
- HART presented the vehicle solution in an update to BoD in Feb 2017.

WOFH Change Order #2

- HART has a cost reimbursement agreement with Hawaiian Electric (HECO) for costs associated with utility relocations including 12kV and 46kV lines for WOFH.
 - The previous NTE contract amount is \$17,228,255.00
- Proposed WOFH CO#2 is \$9,165,797 and includes:
 - procurement of specialized maintenance vehicles (\$7,170,225) ;
 - reimbursement of HECO construction costs to underground portions of 46kV lines (\$1,995,572)
- the revised NTE will be \$26,394,052

KHG Change Order #1

- HART has a cost reimbursement agreement with Hawaiian Electric (HECO) for costs associated with utility relocations including 12kV and 46kV lines for KHG.
 - The original NTE contract amount is \$13,000,000.00
- Proposed KHG Change Order No. 1 is \$13,192,600 which allows for procurement of specialized 138kV maintenance vehicles;
- The revised NTE amount will be \$26,192,600.

WOFH Change Order #2 - Costs

Description	Qty	Rate	Total
Vehicle Purchase			
Altec AN67E-E100	6	546,523	3,279,136
Altec TA45-L55	3	382,566	1,147,698
Shipping/Delivery	9	16,396	147,561
Employee Training			
Classroom and Field Training	4000	105	420,000
Fleet Training	768	83.33	64,000
Trainer Fee(\$11,000 per Vehicle)	2	11,000	22,000
Operator/Mechanic Training and Vehicle Inspections	1	50,000	50,000
Outfitting	9		664,025
Overhead	9		1,375,805
Land			
Land/Storage		TBD	
TOTAL COST (without Land/Storage)			7,170,225

KHG Change Order #1 - Costs

Description	Qty	Rate	Total
Vehicle Purchase			
Phoenix - 180	4	1,664,404	6,657,615
Skybird - 215	2	1,292,176	2,584,352
Shipping/Delivery	6	21,973.5	131,841
Employee Training			
Classroom and Field Training	4000	105	420,000
Fleet Training	768	83.33	64,000
Trainer Fee(\$11,000 per Vehicle)	2	11,000	22,000
Operator/Mechanic Training and Vehicle Inspections	1	50,000	50,000
Outfitting	6	231,049	1,386,295
Overhead	6	312,749	1,876,497
Land			
Land/Storage		TBD	
TOTAL COST (without Land/Storage)			13,192,600

West Side Summary

Undergrounding Option	Total
46kV Undergrounding Cost Estimate (WOFH/KHG)	63,000,000
138 kV Underground Cost Estimate (WOFH/KHG)	137,000,000
TOTAL UG RELOCATION COST (Projected)	\$200,000,000

Equipment Option	Total
Altec Vehicle Cost for 46 kV	7,170,225
Skybird & Phoenix Cost for 138 kV	13,192,000
46kV & 12kV Relocation (WOFH) HECO scope	1,995,572
46kV & 12kV Relocation Estimate (WOFH) HART scope	3,704,428
138 kV Underground Relocation Estimate (KHG)	32,000,000
46 kV OH On Shorter Poles Estimate (KHG)	10,000,000
TOTAL COST WITH VEHICLE PURCHASE*	\$68,062,255

* Not including land/storage costs

Estimated Cost Avoidance of \$131,937,745

HECO Working Clearance Conclusions

- Procurement of vehicles reduces underground relocation requirements:
 - Approx 60,500 LF of 46 kV can be maintained in place.
 - Approximately 16,500 LF (of the total 29,100 LF) of 138 kV can be maintained in place.
- Storage of HECO vehicles is being handled separately.
- Cost avoidance figures from the AGS contract are to be finalized.
- Clearance relocations for KHG will be covered by future contract and potentially a separate change order to the KHG Utility Construction Agreement.

Recommendation

- HART Staff recommends approval of these two (2) HECO Utility Construction Agreement Change Orders to allow for reimbursement of costs associated with the procurement of specialized vehicles and additional clearance relocations along WOFH & KHG as detailed.

Mahalo!



